

# Highly Pathogenic Avian Influenza

## February 9, 2022 USDA Confirms Highly Pathogenic Avian Influenza in a Commercial Turkey Flock in Dubois County, Indiana

WASHINGTON – The United States Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) has confirmed the presence of highly pathogenic avian influenza (HPAI) in a commercial turkey flock in Dubois County, Indiana. This is the first confirmed case of HPAI in commercial poultry in the United States since 2020.

Avian influenza does not present an immediate public health concern. No human cases of these avian influenza viruses have been detected in the United States. As a reminder, the proper handling and cooking of poultry and eggs to an internal temperature of 165 °F kills bacteria and viruses.

Samples from the affected flock, which experienced increased mortality, were tested at the Indiana Animal Disease Diagnostic Laboratory at Purdue University, part of the National Animal Health Laboratory Network, and confirmed at the APHIS National Veterinary Services Laboratories (NVSL) in Ames, Iowa. Virus isolation is ongoing.

APHIS is working closely with the Indiana Board of Animal Health on a joint incident response. State officials quarantined the affected premises, and birds on the property were depopulated to prevent the spread of the disease. Birds from the flock will not enter the food system.

As part of existing avian influenza response plans, Federal and State partners are working jointly on additional surveillance and testing in the nearby area. The United States has the strongest AI surveillance program in the world, and USDA is working with its partners to actively look for the disease in commercial poultry operations, live bird markets and in migratory wild bird populations.

Anyone involved with poultry production from the small backyard to the large commercial producer should review their biosecurity activities to assure the health of their birds. APHIS has materials about biosecurity, including videos, checklists, and a toolkit available at <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/df-resources/df-resources>

USDA will report this finding to the World Organisation for Animal Health (OIE) as well as international trading partners. USDA also continues to communicate with trading partners to encourage adherence to OIE standards and minimize trade impacts. OIE trade guidelines call on countries to base trade restrictions on sound science and, whenever possible, limit restrictions to those animals and animal products within a defined region that pose a risk of spreading disease of concern.

In addition to practicing good biosecurity, all bird owners should prevent contact between their birds and wild birds and report sick birds or unusual bird deaths to State/Federal officials, either through their state veterinarian or through USDA's toll-free number at 1-866-536-7593.

Additional information on biosecurity for backyard flocks can be found at <http://healthybirds.aphis.usda.gov>.

### ***Additional background***

Avian influenza (AI) is caused by an influenza type A virus which can infect poultry (such as chickens, turkeys, pheasants, quail, domestic ducks, geese, and guinea fowl) and is carried by free flying waterfowl such as ducks, geese and shorebirds. AI viruses are classified by a combination of two groups of proteins: hemagglutinin or "H" proteins, of which there are 16 (H1–H16), and neuraminidase or "N" proteins, of which there are 9 (N1–N9). Many different combinations of "H" and "N" proteins are possible. Each combination is considered a different subtype and can be further broken down into different strains which circulate within flyways/geographic regions. AI viruses are further classified by their pathogenicity (low or high)—the ability of a particular virus strain to produce disease in domestic poultry.

### **January 18, 2022 USDA Confirms Additional Highly Pathogenic Avian Influenza Finds in Wild Birds**

WASHINGTON,-The United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) has confirmed two additional findings of highly pathogenic avian influenza (HPAI) in wild birds – one in Colleton County, South Carolina and one in Hyde County, North Carolina. These finds follow confirmation on January 14, 2022 of HPAI in a wild bird in Colleton County, South Carolina. All three findings are H5N1 HPAI.

These findings are not unexpected, as wild birds can be infected with HPAI and show no signs of illness. They can carry the disease to new areas when migrating. APHIS anticipates additional wild bird findings as our robust wild bird sampling program continues into the spring.

APHIS will post these and all future wild bird findings on its [website](#) on a weekly basis. Stakeholders should check the website on a routine basis, as no future stakeholder announcements are planned for wild bird findings.

Since wild birds can be infected with these viruses without appearing sick, people should minimize direct contact with wild birds by using gloves. If contact occurs, wash your hands with soap and water, and change clothing before having any contact with healthy domestic poultry and birds. Hunters should dress game birds in the field whenever possible and practice good biosecurity to prevent any potential disease spread. Biosecurity information is available at: [https://www.aphis.usda.gov/publications/animal\\_health/2015/fsc\\_hpai\\_hunters.pdf](https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf).

Given these additional findings, anyone involved with poultry – commercial or backyard flocks alike – should review their biosecurity plan and enhance their biosecurity practices to assure the health of their birds. APHIS has materials about biosecurity, including videos, checklists, and a toolkit available for producers on our website.

In addition to practicing good biosecurity, all bird owners should prevent contact between their birds and wild birds and report sick birds or unusual bird deaths to State/Federal officials, either through their state veterinarian or through USDA's toll-free number at 1-866-536-7593.

Additional information on biosecurity for backyard flocks can be found at <http://healthybirds.aphis.usda.gov>.

### **Additional background**

Avian influenza (AI) is caused by an influenza type A virus which can infect poultry (such as chickens, turkeys, pheasants, quail, domestic ducks, geese, and guinea fowl) and is carried by free flying waterfowl such as ducks, geese and shorebirds. AI viruses are classified by a combination of two groups of proteins: hemagglutinin or "H" proteins, of which there are 16 (H1–H16), and neuraminidase or "N" proteins, of which there are 9 (N1–N9). Many different combinations of "H" and "N" proteins are possible. Each combination is considered a different subtype and can be further broken down into different strains which circulate within flyways/geographic regions. AI viruses are further classified by their pathogenicity (low or high)—the ability of a particular virus strain to produce disease in domestic chickens.

### **January 14, 2022 USDA Confirms Highly Pathogenic Avian Influenza in a Wild Bird in South Carolina**

WASHINGTON, – The United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) has confirmed highly pathogenic Eurasian H5 avian influenza (HPAI) in a wild American wigeon in Colleton County, South Carolina.

Eurasian H5 HPAI has not been detected in a wild bird in the United States since 2016. There was a case of HPAI (H7N3) in one commercial turkey breeder flock in South Carolina in 2020 due to a North American lineage virus.

The Centers for Disease Control and Prevention considers the risk to the general public from HPAI H5 infections to be low. No human infections with Eurasian H5 viruses have occurred in the United States. As a reminder, the proper handling and cooking of poultry and eggs to an internal temperature of 165°F kills bacteria and viruses, including HPAI.

Anyone involved with poultry production from the small backyard to the large commercial producer should review their biosecurity activities to assure the health of their birds. APHIS has materials about biosecurity, including videos, checklists, and a toolkit available at <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/df-resources/df-resources>.

The United States has the strongest AI surveillance program in the world, and USDA is working with its partners to actively look for the disease in commercial poultry operations, live bird markets, and in migratory wild bird populations. APHIS Wildlife Services collected the sample from the hunter-harvested American wigeon, and it was initially tested at the Clemson Veterinary Diagnostic Center (a member of the National Animal Health Laboratory Network). The presumptive positive samples were then sent to APHIS' National Veterinary Services Laboratories (NVSL) for confirmatory testing.

Since wild birds can be infected with these viruses without appearing sick, people should minimize direct contact with wild birds by using gloves. If contact occurs, wash your hands with soap and water, and change clothing before having any contact with healthy domestic poultry and birds. Hunters should dress game birds in the field whenever possible and practice good biosecurity to prevent any potential disease spread. Biosecurity information is available at: [https://www.aphis.usda.gov/publications/animal\\_health/2015/fsc\\_hpai\\_hunters.pdf](https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf).

In addition to practicing good biosecurity, all bird owners should prevent contact between their birds and wild birds and report sick birds or unusual bird deaths to State/Federal officials, either through their state veterinarian or through USDA's toll-free number at 1-866-536-7593. Additional information on biosecurity for backyard flocks can be found at <https://healthybirds.aphis.usda.gov>.

### **Additional background**

Avian influenza (AI) is caused by an influenza type A virus which can infect poultry (such as chickens, turkeys, pheasants, quail, domestic ducks, geese, and guinea fowl) and is carried by free flying waterfowl such as ducks, geese and shorebirds. AI viruses are classified by a combination of two groups of proteins: hemagglutinin or "H" proteins, of which there are 16 (H1–H16), and neuraminidase or "N" proteins, of which there are 9 (N1–N9). Many different combinations of "H" and "N" proteins are possible. Each combination is considered a different subtype and can be further broken down into different strains which circulate within flyways/geographic regions. AI viruses are further classified by their pathogenicity (low or high)—the ability of a particular virus strain to produce disease in domestic chickens.